

CHICKEN c-SRC cDNA

(SEQ ID NO:2)

1 tctgacaccc atctgtctgt ctgtctgtgt gctgcaggag ctgagctgac tctgtctgtgg
61 cctcgcgtac cactgtggcc aggccgttagc tggacgtgc agcccaccac catggggagc
121 agcaagagca agcccaagga ccccagccag cgccggcgca gcctggagcc acccgacacg
181 acccaccacg ggggattccc agcctcgacg acccccaaca agacagcagc ccccgacacg
241 caccgcaccc ccagccgctc ctttgggacc gtggccaccc agcccaagct cttcgaaaa
301 ttcaacactt ctgacacccgt tacgtcgccg cagcgtccg gggactggc tggcggcgct
361 accacttgc tggctctata cgactacgag tcccgactg aaacggactt gtccattcaag
421 aaaggagaac gcctgcagat tgtcaacaac acggaagggtg actgggtggct ggctcattcc
481 ctcactacag gacagacggg ctacatcccc agtaactatg tggcccccctc agactccatc
541 caggtgaag agtggtaactt tgggaagatc actcgccgg agtccgagcg gctgctgctc
601 aacccgaaa accccgggg aacccttcttgc tggccggaga gcgagacgac aaaagggtgcc
661 tattgcctct cggtttctga ctttgacaaac gccaaggggc tcaatgtgaa gcaactacaag
721 atccgcaagc tggacagcgg cggcttctac atcacccac gcacacagtt cagcagcctg
781 cagcagctgg tggcctacta ctccaaacat gctgatggct tgtggccaccc cctgaccaac
841 gtctggccca cgtccaaagcc ccagacccag ggactcgcca aggacgcgtg gggaaatcccc
901 cgggagtcgc tggggctgggaa ggtgaagctg gggcagggtc gcttggaga ggtctggatg
961 gggacctggaa acggcaccac cagagtggcc ataaagactc tgaagccggg caccatgtcc
1021 cggaggccct tccgtcagga agcccaagtg atgaagaagc tccggcatga gaagctggtt
1081 cagctgtacg cagttgggtc ggaagagcccc atctacatcg tcaactgagta catgagcaag
1141 gggagccctcc tggatttctt gaagggagag atgggcaagt acctgcccgt gccacagctc
1201 gtcgatatgg ctgctcagat tgcattccggc atggccatg tggagaggat gaactacgtg
1261 caccgagacc tggggccggc caacatccctg gtgggggaga acctgggtgtg caagggtggct
1321 gacttgggc tggcacgcct catcgaggac aacgagtaca cagcacggca aggtgccaag
1381 ttcccccata agtggacagc ccccgaggca gcccctatg gcccgttac catcaagtcg
1441 gatgtctggc ccttcggcat cctgctgact gagctgacca ccaagggccg ggtgccatata
1501 ccagggatgg tcaacaggga ggtgctggac cagggtggaga ggggctaccg catccctgc
1561 ccggccgagt gccccggatc gctgcattgac ctatgtgcc agtgcgtggc gagggaccct
1621 gaggagcggc ccactttga gtacctgcag gcctcctgg aggactactt cacctcgaca
1681 gagccccagt accagcctgg agagaaccta taggcctgga gctccctctg gaccagaggc
1741 ctcgtgtgg ggtacaggg

FIG. 1

CHICKEN cSRC ENCODED PROTEIN

(SEQ ID NO:3)

MGSSKSKPKDPSQR^{RS}LEPPDSTHHGGFPASQTPNKTAA
PDTHRTPSRSFGTVATEPKLFGGFNTSDTVTSPQRAGALA
GGVTTFVALYDYESRTETDLSFKKGERLQIVNNTEGDWWL
AHSLTTGQTGYIPS^{NY}VAPS^{DSI}QAE^EWYFGKIRRESER
LLLNPENPRGTFLVRESETTKGAYCLSVSDFDNAKGLNVK
HYKIRKLDGGFYITSRTQFSSLQQLVAYYSKHADGLCHR
LTNVCPTSKPQTQGLAKDAWEIPRESLRLEV^{KL}GQGCFGE
VWMGTWNGTTRVAIKTLKPGTMSPEAFLQEAQVMKKLRHE
KLVQLYAVVSE^{EPIY}IVTEYMSKGSLDFLK^{GEMG}KYLRL
PQLVDMAAQIASGMAYVERMNYVHRDLRAANILVGENL
VCKVAD^FGLARLIEDNEY^TARQGAKFPIKWT^APEAALYGR
FTIKSDVWSFGILLTELTTKGRVPY^{PGM}VNREVLDQVERG
YRMP^CCPPEC^PESLHDLMCQCWRDPEERPTFEYLQAFLE
DYFTSTEPQY^QPGENL

FIG. 2

HUMAN c-SRC cDNA

(SEQ ID NO:4)

1 ggcgcgcgtc ccgcaggccg tggatgccgc cggcggagg tggcccgac cgcagtgccc
61 caagagagct ctaatggta ccaatgtacag gttggctta ctgtgactcg gggacgcccag
121 agctcctgag aagatgtcag caatacaggc cgcctggcca tccggatcag aatgtattgc
181 caagtacaac ttccacggca ctggcggca ggacctgccc ttctgcaaaag gagacgtgct
241 caccattgtg gccgtcacca aggacccaa ctggatcaca gccaaaaaca aggtgggccc
301 tgagggcata atcccagcca actacgtcca gaagcgggag ggcgtgaagg cgggtaccaa
361 actcagcctc atgccttgg tccacggca gatcacacgg gagcaggctg agcggctct
421 gtacccggcg gagacaggcc tggatcgtt gcccggagagc accaactacc cgggagacta
481 cacgctgtgc gtgagctgacg acggcaaggt ggagcactac cgcacatgt accatgccag
541 caagctcagc atgcacggagg aggtgtactt tgagaacccatc atgcagctgg tggagcacta
601 cacctcagac gcagatggac tctgtacgac cctcattaaa ccaaagggtca tggagggcac
661 agtggcggcc caggatgagt tctaccgcag cggctggcc ctgaacatga aggagctgaa
721 gctgctgcag accatcgaaa aggggggagg tggagacgtg atgtgggccc attaccgagg
781 gaacaaagtc gcccgtcaagt gcatatggaa cgacgcccact gcccaggccct tccctggctga
841 agcctcagtc atgacgcaac tgcggcatag caacctgggt cagctcctgg gctgtatcgt
901 ggaggagaag ggcgggctc acatcgatc tgagtacatg gccaaggggaa gccttggaa
961 ctacctgcgg tctaggggtc ggtcgttgc gggcggagac tgcgttgcata agtttcgt
1021 agatgtctgc gaggccatgg aatacctggaa gggcaacaat tgcgttgcata gagacctggc
1081 tgcccgcaat gtgttgggt ctgaggacaa cgtggccaaag gtcagcgtact ttgttctcac
1141 caaggaggcg tccagcaccc aggacacggg caagctgcca gtcaagtgga cagccctgaa
1201 ggcctgaga gagaagaaat tctccactaa gtctgacgtg tggagttcg gaatccctct
1261 ctgggaaatc tactcccttgc ggcgttgc ttatccaaga attccctgaa aggacgtcgt
1321 ccctcggtt gagaaggct acaagatggaa tgcccccgc ggcgtccgc cccgttct
1381 tgaagtcatg aagaactgtt ggcacccgtt ggcgtccatg cggcccttct tccctacatgt
1441 ccgagaggcgtt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt
1501 ctgggttgcgtt ggcgttgggg gactgaacct ggaagatcat ggacctgggtt cccctgtca
1561 ctggggccgtt ggcgttgcgtt agcccccgtt ggcgttgggg cttttttttt tttttttttt
1621 ctgcacccctt ccggccccgtt ctcttgcgtt cccacccgtt gggcctgggg agcccaactgaa
1681 gggccagggg aggaaggagg ccacggaggcg ggaggcaggcg cccaccacg tcggcttcc
1741 ctggccccc ggcactcgcc ttcttagatgt ttatttccctt tccctttttt agatttttt
1801 tccgttgcgtt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt
1861 ggcattttac aagaagtacg aatctttttt ttctgttgcgtt gcccgttgggg gttttttttt
1921 ccggggccctt ctcttagggac ccctcgcccc agccttgcgtt cccatttgcgtt gtccttgcgtt
1981 ccgtgttgcgtt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt
2041 cgaggcagac gtctgtcagg ggcttggatt tcgtgttgcgtt ctggccaccgg cccaccggcc
2101 ttgtgagatg gaattgtat aaaccacgccc atgaggacac cgcggccgc ctcggccgtt
2161 cctccaccgtt aaaaaaaaaaaaaaaa aaaaaaaaaaaaaaaa

FIG. 3

HUMAN c-SRC ENCODED PROTEIN
(SEQ ID NO:5)

MSAIQAAWPSGTECIAKYNFHGTAEQDLPFCKGDVLTIVAVTKD
PNWYKAKNKVGREGIIPANYVQKREGVKAGTKLSLMPWFHGKIT
REQAERLLYPPETGLFLVRESTNYPGDYTLCSVSCDGKVEHYRIMY
HASKLSIDEEVYFENLMQLVEHYTSDADGLCTRLIKPKVMEGTVA
AQDEFYRSGWALNMKELKLLQTIGKGEFGDVMLGDYRGNKVAV
KCIKNDATAQAFLAEASVMTQLRHSNLVQLGVIVEEKGGLYIVTE
YMAKGSLVDYLRSGRSVLGGDCLLKFSLDVCEAMEYLEGNNFVH
RDLAARNVLVSEDNVAKVSDFGLTKEASSTQDTGKLPVKWTAPEAL
REKKFSTKSDVWSFGILLWEIYSFGRVPYPRIPLKDVVPRVEKGYKM
DAPDGCPPAVYEVMKNCWHLDAAMRPSFLQLREQLEHIKTHELHL

FIG. 4

Activation of endogenous Src activity by bFGF and VEGF

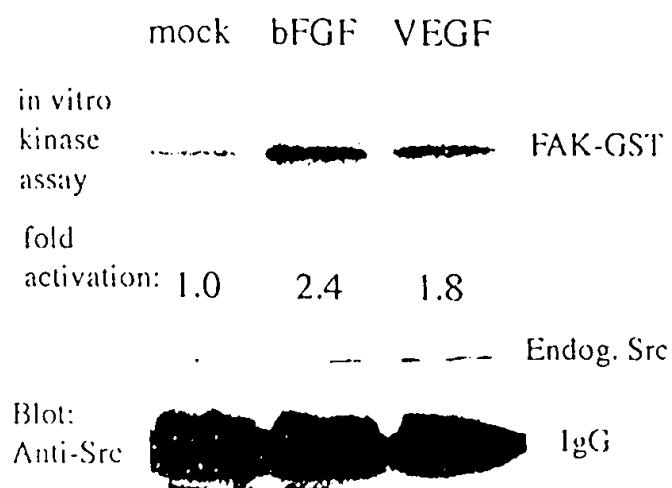


FIG. 5

Retroviral expression of Src A activates vascular MAP kinase phosphorylation

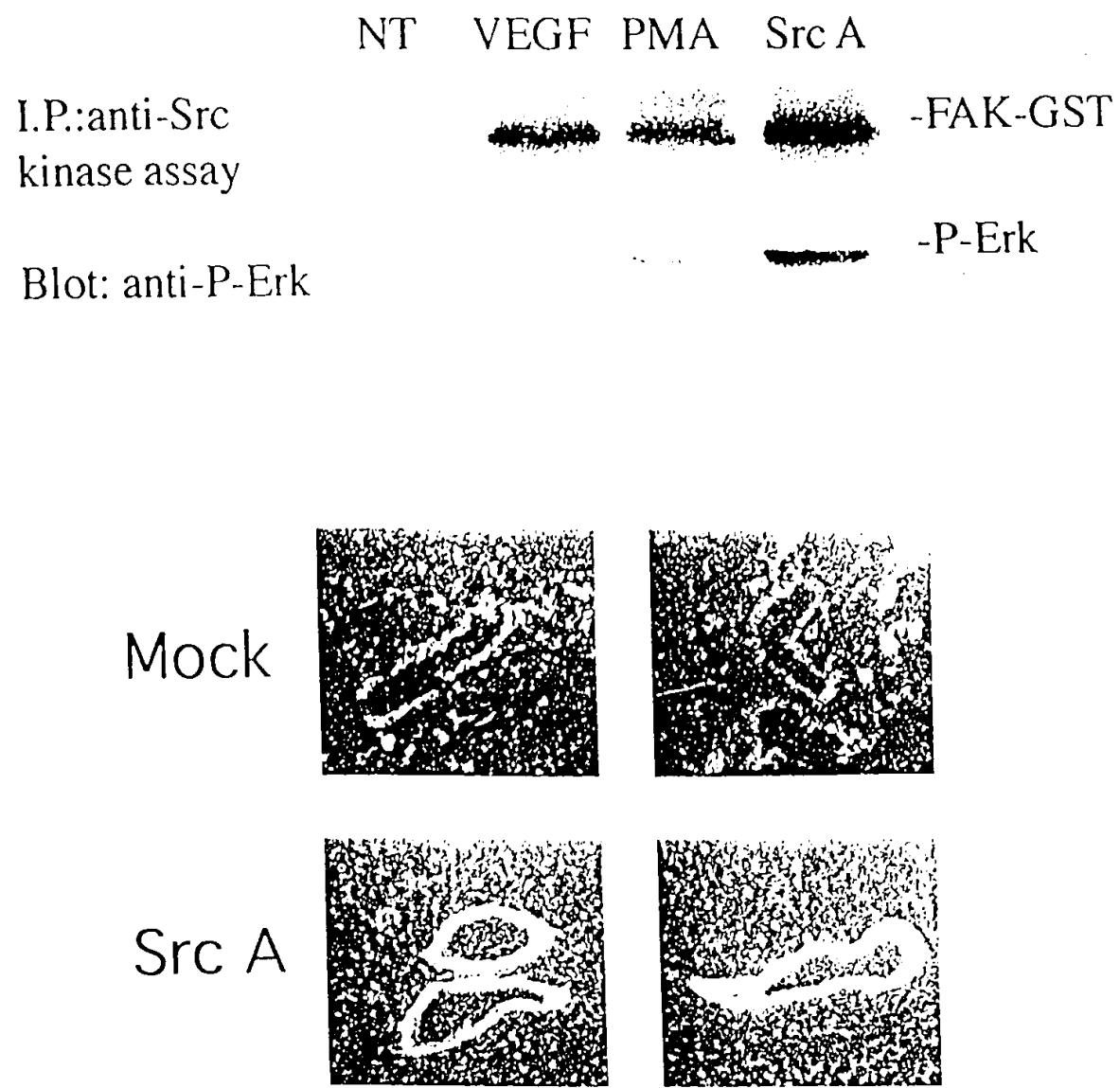


FIG. 6

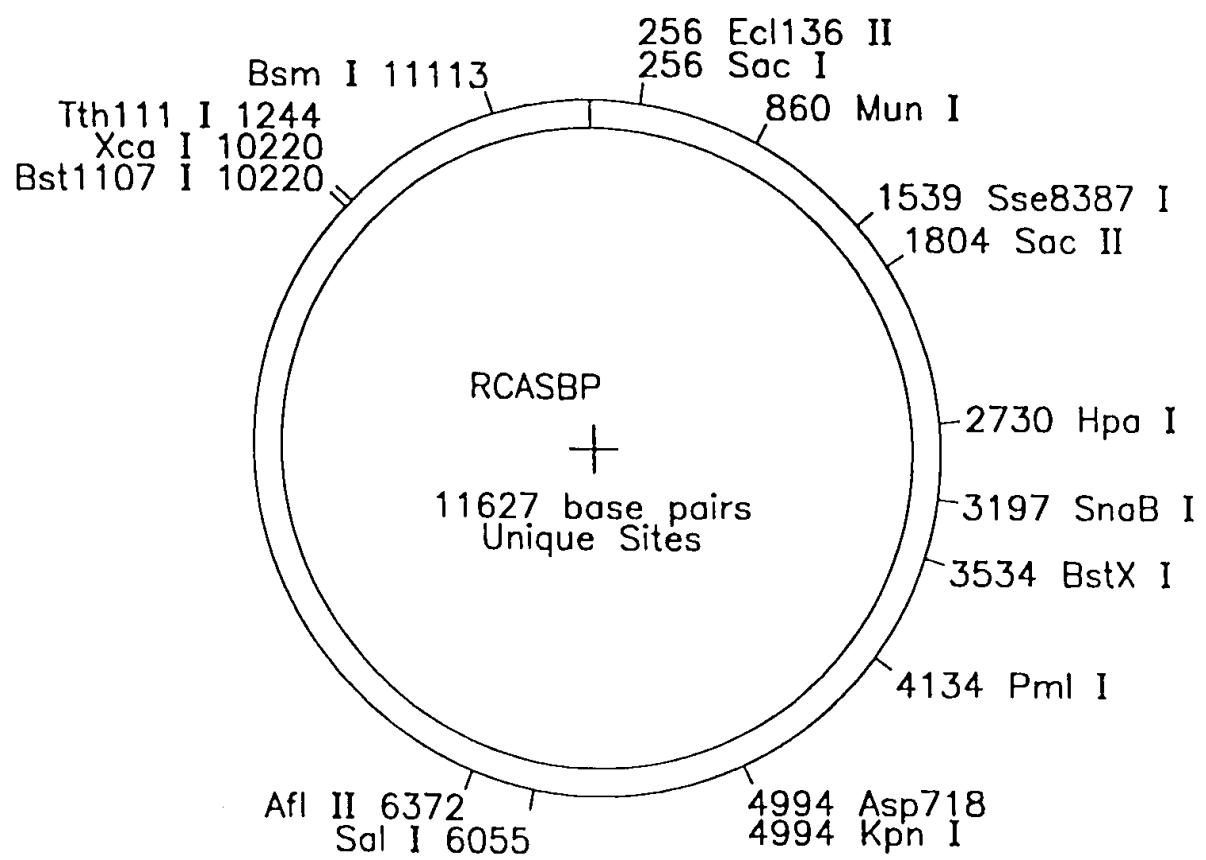


FIG. 7

human Yes-1 Protein amino acid sequence

"MGCIIKSKENKSPA~~I~~KYRPENTPEPVSTSVSHYGAEP~~TT~~VSPCPS
SSAKGTAVNFSSLSMTPFGGSSGVTPFGGASSSF~~S~~VVPSSYPAGLTGGVTIFVALYDY
EARTTEDLSFKKGERFQIINNTEDWWEARSIATGKNGYI~~P~~SNYVAPADSIQAE~~W~~YF
GKMGRKDAERLLLNP~~G~~NQRGIFLVRESETKGAYSL~~S~~IRDWDEIRGDNVKHYKIRKLD
NGGYYITTRAQFDTLQKLVKHYTEHADGLCHKLTTVCPTVKPQTQGLAKDAWEIPRES
LRLEV~~V~~KL~~G~~QGCFGEVWMGTWNGTTKVAIKTLKPGTMMPEAFLQEAQIMKKLRHDKLVP
LYAVVSE~~E~~PIYIVTEFMSKG~~S~~LDFLKEGDGKYL~~K~~PQLVDMAAQIADGMAYIERMNY
IHRDLRAANILVGENLVCKIAD~~G~~LARLIEDNEY~~T~~ARQGAKFPIKWT~~A~~PEAALYGRFT
IKSDVWSFGILQTELVTKGRVPYPMVNREVLEQVERGYRMPCPQGC~~P~~ESLHELMNLC
WKKDPDERPTF~~EY~~IQS~~F~~LEDYFTATEPQYQPG~~E~~NL"

FIGURE 8

FIGURE 9

1 ggtagggccaa ggcacacggg tctgaccctt gggccggccc ggagcaagtg acacggacc
61 gtcgcctatc ctgaccacag caaaagcggcc cggagcccgc ggaggggacc tgacgggggc
121 gtaggcgcgg gaaggctggg ggccccggag ccggccggc gtggcccgag ttccggtag
181 cggacggcgg cgccgcgcaga tttgataatg ggctgcatta aaagtaaaga aaacaaaagt
241 ccagccatta aatacagacc taaaataact ccagagctg tcagataaag tggagccat
301 tatggagcag aaccactac agtgcacca tgcgtcat cttagcagaaa gggAACAGCA
361 gttaattca gcagtttgcatt ttcagtggtt ccaagttcat atectgtcg tttAACAGGT
421 ggaggtgcatt ctcccttatt ttcagtggtt ccaagttcat atectgtcg tttAACAGGT
481 ggtgttacta tatttgcatt tttatgtat tatgaagctg gaactacaga agaccttca
541 tttaagaagg gtgaaagatt tcaaataatt aacaatacgg aaggagattg gtggaaagca
601 agatcaatcg ctacaggaaa gaatggttat atcccgagca attatgtac gcctgcagat
661 tccattcagg cagaagaatg gtatggc aaaaatggga gaaaagatgc taaaagatca
721 ctttgcattt ctggaaatca acgaggatt ttcttagtaa gagagatgaa aacaactaaa
781 ggtgttattt cccttctat tcgtgattgg gatgagataa ggggtgacaa tggaaacac
841 tacaaaattt gggaaacttga caatggtga tactatatca caaccagac acaatttgat
901 actctgcaga aattggtga acactacaca gaacatgctg atggttatg ccacaagttg
961 acaaactgtgt gtccaaactgt gaaaacctcg actcaaggct tagcaaaaga tgcttggaa
1021 atccctcgag aatcttgcg actagaggtt aaactaggac aaggatgtt cggcgaagtg
1081 tggatgggaa catggaaatgg aaccacgaaa gtagcaatca aaacactaaa accaggtaca
1141 atgatgcctt aagcttccat tcaagaagct cagataatga aaaaattaag acatgataaa
1201 ctgttccat tataatgtgt tggttctgaa gaaccaattt acattgtcac tgaattttag
1261 tcaaaaaggaa gcttatttgcatttccat ttcctttagt gatgttgcatttcatatatgaa
1321 cagctggttt atatggctgc tcagattgtt gatgttgcatttcatatatgaa
1381 tatattcacc gagatgttcg ggctgtcaat attcttgcatttcatatatgaa
1441 atagcagact ttgggttagc aaggtaattt gatgttgcatttcatatatgaa
1501 gcaaaaatttc caatcaaatttgcatttcatatatgaa
1561 aagtctgatg tctggtcatttcatatatgaa
1621 ccatatccag gtatggtgaatggccgtgcatttcatatatgaa
1681 ccgtgccttc agggctgtcc agaattccctc catgaatttgcatttcatatatgaa
1741 gaccctgatg aaagaccaac atttgcatttcatatatgaa
1801 gctacagagc cacgttacca gcccaggagaa aatttgcatttcatatatgaa
1861 gcacaaatct gccaaaatatttgcatttcatatatgaa
1921 aaatcttctt tactctgcatttcatatatgaa
1981 aaaccacttt tttttccca agtattaaatc tctaatgtac caatgtgaa tttatcagcg
2041 tatttcagggg tccaaacaaa atagagctaa gatactgatg acagtgtggg tgacagcatg
2101 gtaatgaagg acagtggggc ttctgttttcatatatgaa
2161 aaagtctgatg ttgtctcaat tttttatatttgcatttcatatatgaa
2221 agctataccat taaaattttgcatttcatatatgaa
2281 agttttttaa agtttcttgcatttcatatatgaa
2341 gtatgcatttcatatatgatttgcatttcatatatgaa
2401 atataaaacag gatctcaat tttttatatttgcatttcatatatgaa
2461 taatgtcgat taaaattttgcatttcatatatgaa
2521 agtccttttc tgaagagttt gactttagat ttttgcatttcatatatgaa
2581 tttatgtgggt tgcatttgcatttcatatatgaa
2641 gggggaaatgt tttgtattttcatatatgaa
2701 ttttttttttcaat tttttatatttgcatttcatatatgaa
2761 ccacaaatag aaaatatttgcatttcatatatgaa
2821 tagatgttca gggggggatggat tttttatatttgcatttcatatatgaa
2881 ttacaagtttcatatatgatttgcatttcatatatgaa
2941 ctttgcgtggc actcagatgttcatatatgaa
3001 gtataactat aaaacttatttgcatttcatatatgaa
3061 gttatggctt cacatttgcatttcatatatgaa
3121 ccagtttca aatcatgttttcatatatgaa
3181 gagtctcgat tttttatatttgcatttcatatatgaa
3241 ctgcctccca ggttccacaccatttgcatttcatatatgaa
3301 tgcccaccac cacgcctggc tagttttttgcatttcatatatgaa
3361 ttagccaggat tttttatatttgcatttcatatatgaa
3421 gctgggat tttttatatttgcatttcatatatgaa

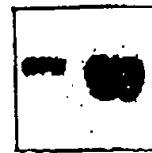
3481 atgggtgg tttttccct tttagaatac attaaatggc tgatttgggg aggaaaactt
3541 attctgaata ttaacgggtt ggaaaagggg acagtttttta ccctaaagtg caaaagtgaa
3601 acatacaaaa taagactaat ttttaagagt aactcagtaa ttccaaaata cagattgaa
3661 tagcagcatt agtgggttga gtgtctagca aaggaaaaat tgatgaataa aatgaaggc
3721 tgggttatat gttttaaaat actctcatat agtcacactt taaattaagc ctttatattag
3781 gccctctat tttcaggata taattcttaa ctatcattat ttacctgatt ttaatcatca
3841 gattcgaaat tctgtccat ggcgtatatg ttcaaattca aaccattttt aaaatgtgaa
3901 gatggacttc atgcaagttg gcagtggttgc tggtactaaa aattgtgggtt gtttttctg
3961 tttacgtAAC ctgttttagta ttgacactct ctaccaagag ggtttccctt agaagagtgc
4021 tgtcattatt tcctcttatac aacaacttgc gacatgagat ttttaaggg ctttatgtga
4081 actatgatat tctaattttt ctaagcatat tcaaaaagggt gacaaaatttta cgtttatgt
4141 ctaaatctaa tcagggaaatg aaggcaggg aagttgatgg tattcattag gtttttactg
4201 aatggagcag ttcccttataat aataacaattt gtatagtagg gataaaacac taacaatgt
4261 tattcattttt aaattgttct gtatttttaa attgccaaga aaaacaactt tgtaaatttg
4321 gagatattttt ccaacagctt ttctgtttca gtgtcttaat gtggaaaggta acccttacca
4381 aaaaaggaag ttggcaaaaaa cagccttcta gcacactttt ttaaatgaat aatggtagcc
4441 taaaacttaat attttataaa agtattgtaa tattgttttg tggataatttgg aaataaaaag
4501 ttctcattga atgcacc

FIGURE 9 Con't

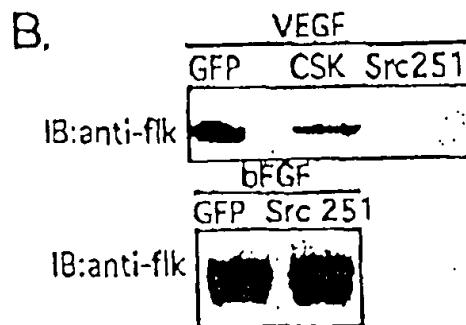
A

VEGF: - +
Eco-GFP: + +

IB:anti-flik



B



C

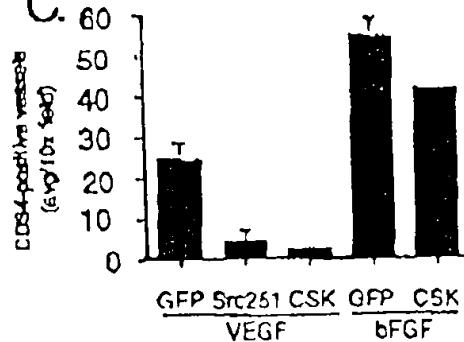


FIGURE 10

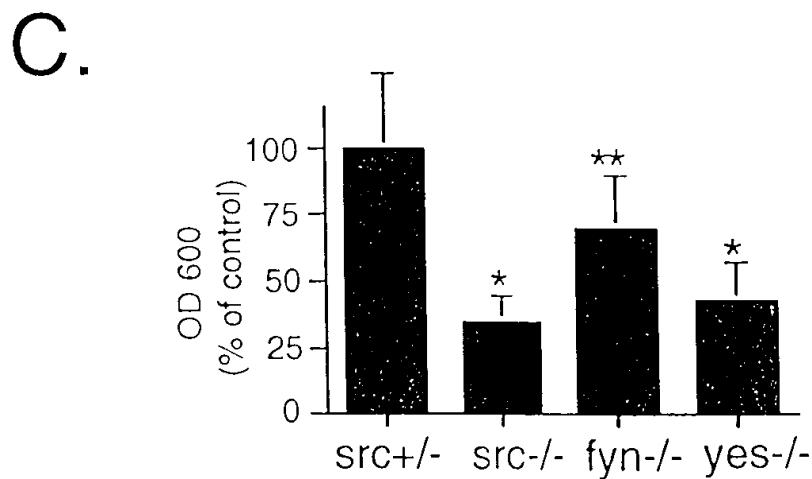
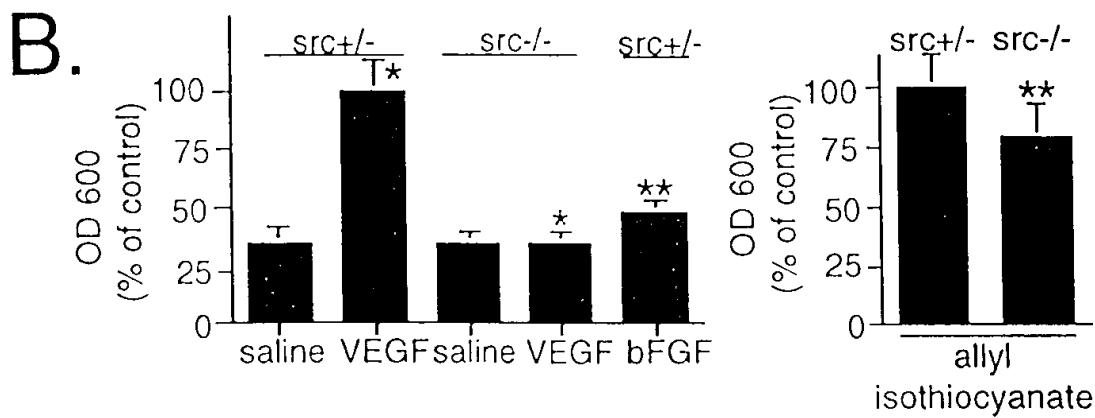
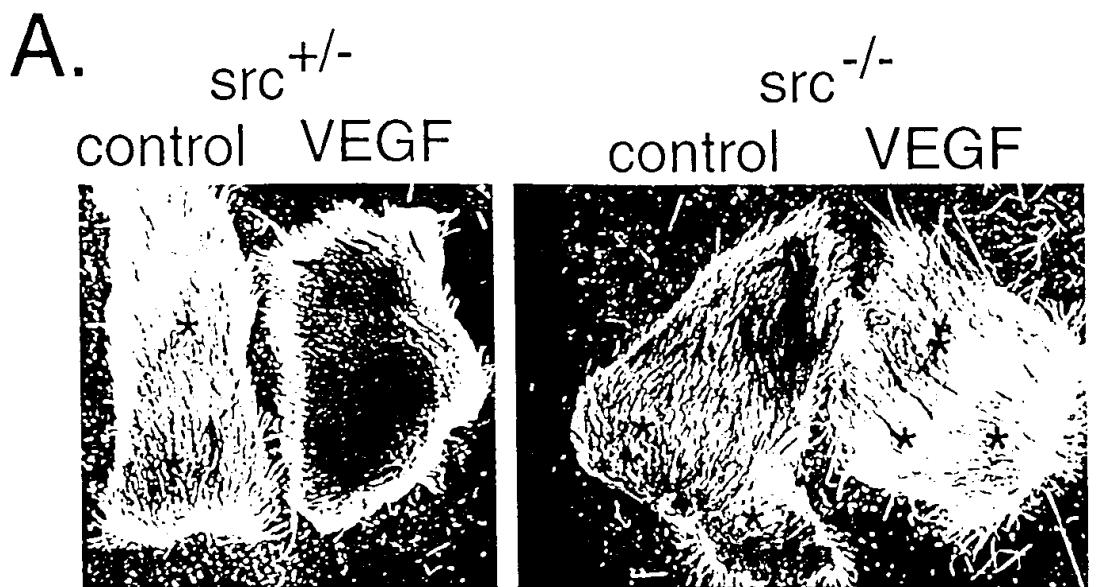


FIG. 11

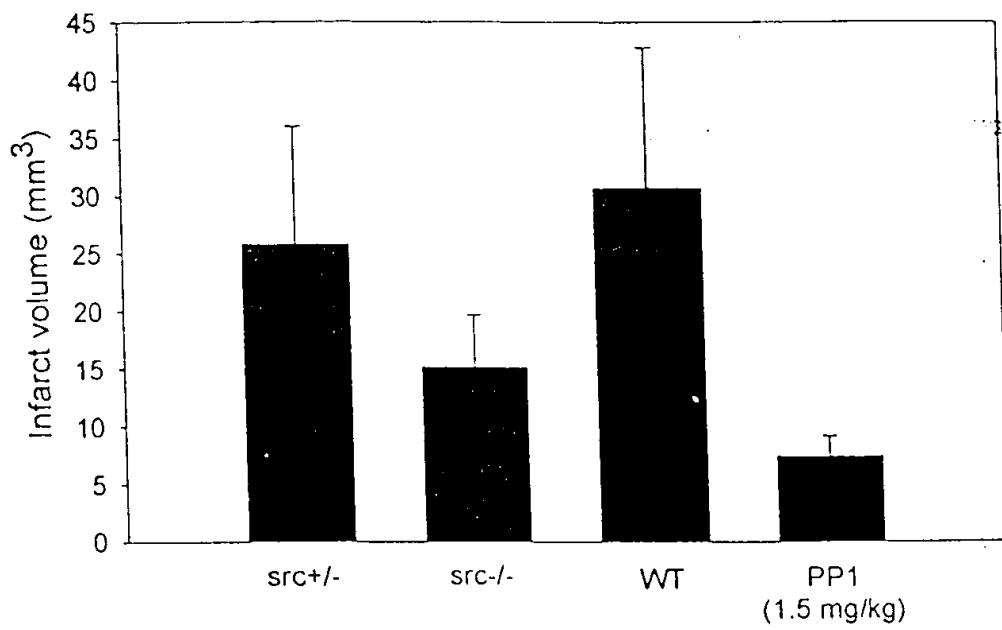


FIG 12

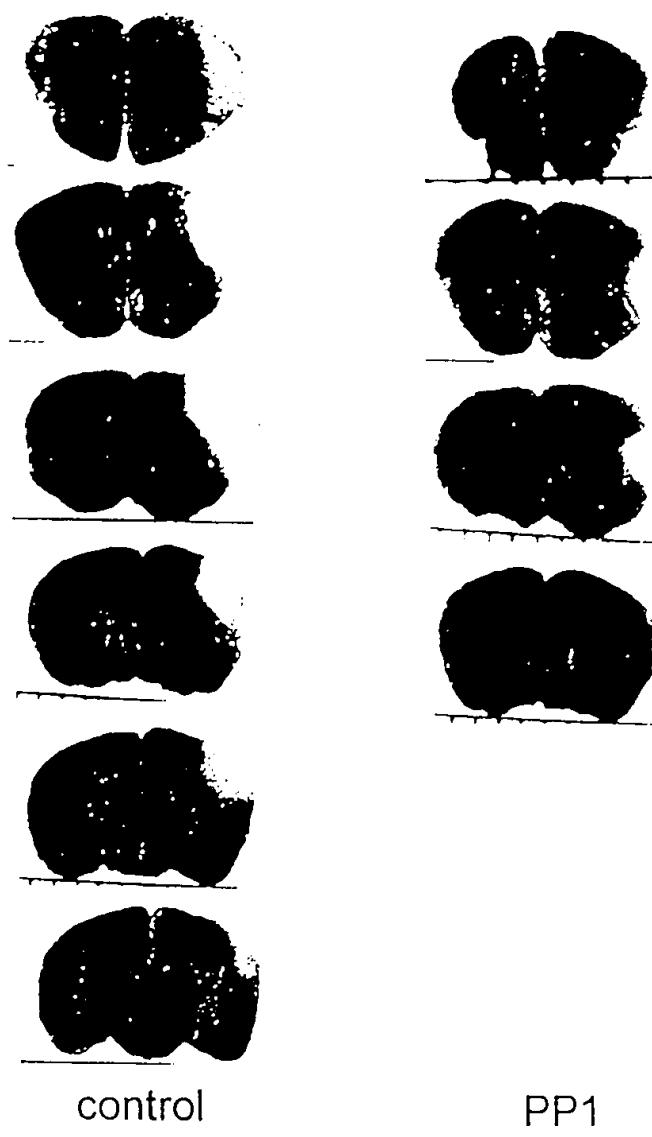


FIG 13